## AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

## **Listing of Claims:**

- 1. (previously presented) A sterilization chamber for sterilizing objects, comprising a vacuum conduit connected to a vacuum pump, also comprising a conduit for a vapour vapor composite consisting of water vapour vapor and hydrogen peroxide vapour vapor, and comprising a conduit for flood gas for application in a process in which the vapour vapor composite, fed without carrier gas flow into the sterilization chamber in which a vacuum prevails, settles on the surfaces of the objects to be sterilized and on the surfaces of the sterilization chamber in the form of a condensation layer, which is suctioned off after a predetermined reaction time by means of further evacuation of the sterilization chamber, wherein the surfaces (13) of the sterilization chamber (4) are made of poor heat-conducting, water-repellent material.
- 2. (previously presented) A sterilization chamber according to claim 1, wherein its surfaces (13) have a coating (16) of plastic, glass or closed-pore ceramic material.
- 3. (new) A sterilization chamber for sterilizing an object with a vapor composite comprising water vapor and hydrogen peroxide vapor said sterilization chamber comprising:

component parts which come into contact with a condensation layer, said component parts being configured from a material selected from the group consisting of plastic, glass or a closed-pore ceramic material.

- 4. (new) The sterilization chamber of claim 3 further comprising a plastic material which forms a coating covering a surface of the sterilization chamber.
- 5. (new) The sterilization chamber of claim 3, wherein said component parts are configured from a plastic on a PTFE base.
- 6. (new) The sterilization chamber of claim 3, wherein said component parts are configured from silicon rubber.
- 7. (new) The sterilization chamber of claim 3, wherein said sterilization chamber is provided with first valve means and first conduit means for allowing entry and exit of a vapor composite and second valve means and second conduit means for applying a vacuum.
- 8. (new) The sterilization chamber of claim 7, wherein said first conduit means is attached to an evaporator.
- 9. (new) The sterilization chamber of claim 7, wherein said second conduit means is attached to a vacuum pump.
- 10. (new) The sterilization chamber of claim 3, wherein said sterilization chamber is provided with a flood gas valve and flood gas conduit which may be used to ventilate the sterilization chamber.
- 11. (new) A method of sterilizing an object, said method comprising the step of:

exposing an object to a vapor composite within a sterilizing chamber, said sterilizing chamber having component parts which come into contact with a condensation layer, said component parts being configured from a material selected from the group consisting of plastic, glass or a closed-pore ceramic material.

12. (new) The method of claim 11, further comprising the steps of: evacuating the sterilization chamber using a vacuum pump; providing a vapor composite within the sterilization chamber to form a

removing the condensation layer; and ventilating the sterilization chamber.

condensation layer;

- 13. (new) The method of claim 12, wherein said step of evacuating the sterilization chamber further comprises the step of isolating the sterilization chamber from the vacuum pump with a valve.
- 14. (new) The method of claim 11, wherein said vapor composite comprises water and hydrogen peroxide.
- 15. (new) The method of claim 12, wherein said step of removing the condensation layer further comprises evacuating the sterilization chamber.
- 16. (new) The method of claim 15, wherein said step of evacuating the sterilization chamber is conducted at a pressure of from 10 mb to 1 mb.
- 17. (new) The method of claim 15, wherein said step of evacuating the sterilization chamber is conducted at a pressure of approximately 1 mb.
- 18. (new) The method of claim 11, wherein said step of removing the condensation layer is performed after a predetermined reaction time.